DISK DRIVE HAVING APERTURES NEAR THE ID OF A DISK STACK FOR ALLOWING AIRFLOW TO PASS THROUGH THE APERTURES TO REDUCE DISK FLUTTER

ABSTRACT

[00022]   A disk drive includes a disk drive base, a spindle motor attached to the disk drive base, a plurality of disks positioned on the spindle motor, the plurality of disks including a first disk and a second disk, the first disk having a plurality of first disk through apertures adjacent to an inner diameter of the first disk, the first disk through apertures being circumferentially spaced-apart and extending longitudinally through the first disk, a disk spacer positioned between the first and second disks, the disk spacer having a plurality of spacer apertures, the spacer apertures being circumferentially spaced-apart and extending longitudinally through a portion of a thickness of the disk spacer, and a disk clamp for clamping the plurality of disks to the spindle motor. The disk clamp is adjacent to the first disk and has a plurality of clamp through apertures adjacent to an outer diameter of the disk clamp, the clamp through apertures being circumferentially spaced-apart and extending longitudinally through the disk clamp. The first disk through apertures, the spacer apertures, and the clamp through apertures are aligned for allowing airflow to pass through the apertures when the plurality of disks are rotating.